

TRANTINA, L.

Transition from solid bricks to hollow and lighter wall building materials without greater investments. p. 89.

Vol. 34, no. 3, Mar. 1956
SLAVIVO
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

TRANTINA, L.

Ceramic architectural elements. p. 179.
STAVIVO, Praha, Vol. 33, no. 5, May 1955.

SO: Monthly List of East European Accessions, (BEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

TRANIS, M. I.

Glubokii zheleznodorozhnyi vodi v Moskve. Rekonstruktsiia Moskovskogo zhelenodorozhnogo uzla. [Deep railway in Moscow. Reconstruction of Moscow junction]. (Rekonstruktsiia transporta, 1932, no.21-22, p. 16-22, illus.).

DLC: HE7.R4

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
reference Department, Washington, 1952, Unclassified.

TRANCIK, Pavel, inz.

Procedure in the afforestation of waste lands in the area of
the Piestany Forest Enterprise. Les cas 10 no. 3:247-254
Mr '64.

1. Piestany Forest Enterprise.

BC

B-D-9

Determination of volatile components in sodium-buthadiene rubber. R. FAINBERG and N. TRANKOVSKAYA. (Intert. Kautschuk, 1954, No. 2, 9-11). The rubber contains (i) gas consisting of $[CH_2]$ and butadiene (ii) and (iii) volatile substances composed of the residue of rectified (i). The latter is determined by heating at 160° for 3 hr. in a current of N_2 or CO_2 . (Ch. Abstr. (p)

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

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The adhesion of rubber to metals. V. Ivstratov and
N. Frankovskaya. *J. Rubber Ind.* (U. S. S. R.) 1936,
578-82.—A description, with 80 references. A. P.

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

SECTION	SUBSECTION	THIRD SUBSECTION	FOURTH SUBSECTION	FIFTH SUBSECTION	SIXTH SUBSECTION	SEVENTH SUBSECTION	EIGHTH SUBSECTION	NINTH SUBSECTION	TENTH SUBSECTION	ELEVENTH SUBSECTION	TWELFTH SUBSECTION	THIRTEENTH SUBSECTION	FOURTEENTH SUBSECTION	FIFTEENTH SUBSECTION	SIXTEENTH SUBSECTION	SEVENTEENTH SUBSECTION	EIGHTEENTH SUBSECTION	NINETEENTH SUBSECTION	Twentieth Subsection
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T

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5

The Adhesion of Rubber to Metals. V. Evratov and N. Trankovskaya.
(*J. Rubber Ind. (U.S.S.R.)*, 1930, 678-682). - [In Russian] A description,
with 50 references. - 8. 01.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUP 1

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COMMON ELEMENTS																										COMMON ELEMENTS																									
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<p>30</p> <p>Determination of volatile components in sodium-butadiene rubber. B. Fainberg and N. Frankovskaya. <i>Sintet. Kauchuk</i> 1934, No. 2, 10-11. Na butadiene rubber contains: (1) gas consisting of <i>sym</i>-dimethylethylene and butadiene and (2) volatile substances composed of the residue of rectified butadiene. To det. (2), the rubber was heated in a tube in an asbestos box at 150°, and N</p> <p>(0.2% oxygen) and CO₂ were run through the tube for 3 hrs. The results were very nearly the same in each case. A. Pestoff</p>																																																			
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TRANKOVSKAYA, N.,
B. FAINBERG, J. Rubber Ind. 12, 223-9 (1935)

PROCESSING AND PROPERTY INDEX																																																																													
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<p>Swelling of vulcanized synthetic rubber. B. A. Laitberg, N. L. Isaakovich and A. I. Bogomolova. <i>Trudy Gosudarst. Opyt. Zavoda Sintet. Kautchuka Litera B. IV Synthetic Rubber 1935</i>, 100-26. Vulcanized Na butyl rubber swells less in crude oil and machine oil than does vulcanized natural rubber. Vulcanized "petroleum" synthetic rubber (prepd. by the Bunzow method) swelled least in C.H.₄, kerosene and gasoline among various types of rubber tested. The magnitude of the swelling of the Na butyl rubber in comparison with natural rubber in C.H.₄, gasoline and kerosene depends on the compn. of the mixt. In mixts. contg. an accelerator (diphenylguanidine), natural rubber swelled less than Na butyl rubber. The swelling capacity of Na butyl rubber increased with the plasticity of its vulcanizate. The extent of swelling decreased with increased time of vulcanization. With increase in temp. the swelling of natural and butyl vulcanized rubber ("petroleum" rubber was not investigated) increased with increase of temp. Swelling decreased with increase in C black. The swelling of vulcanized Neoprene (incorporated in mixts. under investigation) in gasoline, and in machine oil was insignificant; except in C.H.₄.</p> <p style="text-align: right;">A. A. Boshlinsk</p>																																																																													
<p>ASB-31A METALLURGICAL LITERATURE CLASSIFICATION</p>																																																																													
<table border="1"> <thead> <tr> <th colspan="13">1ST ORDER</th> <th colspan="13">2ND ORDER</th> </tr> </thead> <tbody> <tr> <td colspan="13">[Punch holes]</td> <td colspan="13">[Punch holes]</td> </tr> </tbody> </table>																										1ST ORDER													2ND ORDER													[Punch holes]													[Punch holes]												
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2A 111

Phagocytosis of glycogen by leucocytes in vitro. N. N. Trankvillitski (Kharkov Med. Inst.). *Arkh. Patol.* 12, No. 1, 65-8 (1950). — *In vitro* cultures of human leucocytes incubated at 37° in the presence of glycogen show a good reaction for glycogen in the protoplasm of the granulocytes; lymphocytes give neg. reaction. If the incubation period is omitted no differences from controls are detected. Addn. of small amts. of NaF does not affect the absorption of glycogen by the leucocytes. G. M. K.

TRANKVILLITATI, Aleksandra Nikolayevna

[Physical education for elderly women] Fizicheskaja kul'tura
dlia zhenshchin v pozhilom vozraste. Moskva, Medgiz, 1959.
67 p. (MIRA 13:8)

(PHYSICAL EDUCATION FOR WOMEN)

TRANKVILITATI, N. N. (USSR)

"Carbohydrate Metabolism in Allergic Reactions."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

1895. The Phagocytosis of Glycogen by Leucocytes.
(О фагоцитозе лейкоцитами гликогена in vitro)
N. N. FRANKVILITAT. Архив Патологии [Arkhi
Patol.] 12, No. 1, 65-68, 1950. 3 figs., 14 refs.

It has been previously shown by the author that polymorphonuclear leucocytes take part in the transport of glycogen during the process of sensitization. In the present study the glycogen-carrying capacity of leucocytes was estimated quantitatively in human defibrinated blood before and after exposure to amylase. It was found that glycogen-containing polymorphonuclears usually stained diffusely with Schiff's reagent, and less commonly showed a little fine granularity. In normal blood 71% of the granulocytes contained a small amount of glycogen, and in 18.9% the quantity was considerable. After glycogen was added to the blood the proportion of leucocytes carrying a large amount of glycogen rose to 46.3%.

L. Crome

Abstracts of World Medicine
Vol 8 1950

TRANGYZER, V.A. (Moskva)

Effect of a limited salt diet on cortical dynamics and the course of hypertension [with summary in English]. *Vopr.oit.* 16 no.2:15-19 Mr-Ap '57. (MLL: 10:10)

1. Iz kliniki lechebnogo pitaniya (zav. - prof. F.K.Ment'shikov) i laboratorii vysshay nervnoy deyatel'nosti (zav. - prof. A.I.Makarychev) Instituta pitaniya AMN SSSR, Moskva.

(DIETS, in various dis.

low-sodium in hypertension, eff. on cerebrocortical dynamics (Rus))

(HYPERTENSION, ther.

low-sodium diet, eff. on cerebrocortical dynamics (Rus))

(CEREBRAL CORTEX, physiol.

eff. of low-sodium diet in hypertension (Rus))

(SODIUM

low-sodium diet, eff. on cerebrocortical dynamics in hypertension (Rus))

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<p><i>ln</i></p> <p>Hyperergic reactions. Results of experiments on allergic reactions. D. E. Alpern. <i>Inst. med. exp. Ukraine, Sect. physiol. path.</i> 1938 (in Russian 7-16, in French, 17-18); cf. C. A. 31, 7104¹.—A review. The distribution of blood glycogen in the Arthus phenomenon. N. N. Frankyillan. <i>Ibid.</i> 10-20 (in French, 30).—In the A. phenomenon (also phenomenon) of skin and joints of rabbits at the height of sensitization (after the 5th or 6th injection), the liver glycogen enters the blood plasma and accumulates there. On glucolysis lactic acid is formed and its accumulated amts. det. the intensity and extent of the reaction. Regulatory factors in the progression of the Schwartzman phenomenon. E. N. Domontovich. <i>Ibid.</i> 31-50 (in French, 51-2).—Insulin, thyroxine and intermedin affect the progress of the S. phenomenon in rabbits by causing changes in carbohydrate metabolism. Adrenaline and ergotamine exert their influence by a primary action on the vascular system of the affected tissues. Changes in carbohydrate metabolism in hyperergic reactions of the conjunctiva of tuberculous rabbits. A. B. Katsnel'son, Ts. Ts. Kachan and N. Z. Yufa. <i>Ibid.</i> 53-88 (in French, 89-90).—Lactacidemia produced by ingestion of Na lactate provokes a hyperergic inflammation in conjunctivas previously tuberculin-desensitized, as a response to a local follow-up injection of the latter. Spontaneous inflammatory reactions of the conjunctiva, without a local application of allergen, are also common after Na lactate ingestion. In nontuberculous unsensitized animals with lactacidemia, tuberculin induces slight, rapidly disappearing reactions of the eye. Lactacidemia often accompanies hyperergic reactions in tuberculous as well as healthy animals. Fluctuations of blood sugar are negligible. Lactic acid accumulation stimulates the progression</p>		<p>of hyperergic reactions and is not a result of the latter. This has to be considered in the desensitization therapy of phlyctenous cerato-conjunctivitis. Allergic reactivity in experimental hypertonia. V. A. Anguladze. <i>Ibid.</i> 91-175 (in French, 176-81).—The suboccipital liquor of normal rabbits contains a substance acting on the smooth muscle of the uterus and peripheral vessels, producing hypertonia and increasing the contraction amplitude of isolated organs. The liquor from animals with an artificial hypertonia induced by removal of the pressure regulators, or by sustained hyperergic reactions, is more</p>		<p><i>ng</i></p>	
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potent in its action on smooth muscle, etc., than the liquor from normal animals. This indicates that the substance is a blood-pressure-regulating pituitary hormone released into the liquor of affected animals in greater amounts than in that of normal ones. The artificially induced rise in blood pressure corresponds somewhat with the rise in blood glycogen and lactic acid during hyperergy. **Hyperergy of the nasal mucosa.** L. L. Frumin. *Ibid.* 179-207 (in French, 288-9).—On application of a sp. antigen the nasal mucosa of sensitized rabbits gives a hyperergic reaction. The morphologic changes in the mucosa of sensitized animals are similar to those in the mucosa of human patients with allergic infections of the upper respiratory tract. Intermedin acts as a desensitizer and inhibits the progression of hyperergic reactions on the mucosa. [Each of 15 patients with either common colds (9), bronchial asthma (5) or hay fever (1) was given 2 subcutaneous injections of 0.5-1 cc. of intermedin on 2 alternating days. In only 3 cases was a therapeutic effect absent. The rest (including hay-fever cases) recovered and did not have relapses or untoward effects during 2-3 mos. and up to 1 yr. of observation.] **Paradentoses in the light of the hyperergic reaction.** L. M. Lindenbaum. *Ibid.* 210-38 (in French, 239-40).—The morphologic changes occurring in the paradentium (I) of rabbits with hyperergic inflammations of the joints are similar to those in the tissues of humans afflicted with paradentosis (II). II may appear when the vessels of I are infected on an allergic basis subsequent to diseases characterized by allergic manifestations. Generally II starts with a vascular affliction, but the process develops simultaneously in all the deeper tissues of I, in the pericementum as well as in the alveoli, spreading peripherally. T. Launes

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<div style="display: flex; justify-content: space-between;"> ca 116 </div> <p>Glycogen and lactic acid in exudate in hyperergic reactions and deoxygenation. N. N. Trankvilat (Kharkov Inst., Calcutta). <i>Trans. Bose Research Inst., Calcutta</i> 14, 163-9(1939-41); cf. C.A. 37, 3499.—The hemoglobin content of normal blood in European countries is 14.5-17 g. % with a corresponding Fe range of 48-55 mg. %. Normal Indian blood contains 12.5-14 g. % and a corresponding Fe value of 40-45 mg. %. A marked reduction in total Fe content occurs during the latter part of pregnancy (to 34.2 mg. %). It also sinks considerably below normal in diabetic patients (33.2 mg. %). Nonhematin Fe in normal Bengali subjects is 1.34 mg. %. In tuberculous patients the value is about 60% above normal, and in the newborn child it is 25% above normal. The Cu content of normal subjects is 0.13 mg. %. Blood of the tuberculous patient and the newborn child contain significantly higher amts. of Cu (0.24 and 0.22, resp.).</p> <p style="text-align: right;">W. J. Peterson</p>																																																																																																							
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B-II-2

Absorptive power of tobacco and the humidification process. N. G. GLADKOV and N. A. TRANK-VILITSEVA (Tabac. Prom., 1933, No. 8, 23—30).—All the varieties of tobacco tested at 18—20° and 100% R.H. tended to acquire the same abs. humidity of 45%, which remained const. until mildew appeared. The following R.H. vals. are recommended for operating: picking and crushing departments 70—75; cigarette department 65—70; shipping department 60—65%. The heat generated during humidification accumulates in the tobacco because of the low thermal conductivity. Burning of moist tobacco in bales is caused by microbiological processes. The action of high temp. on the tobacco is to destroy its colloidal properties.

Ch. Ans. (c).

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION
FROM SYNDICATE

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<div style="position: relative; height: 100%;"> CA 17 <p style="margin-top: 40px;">The influence of water vapor and temperature on the hygroscopic properties of tobacco. N. G. Gladkov and N. A. Trankvilitzkaya. <i>Tobachnaya Prom. (Tobacco Ind.)</i> 1934, No. 2, 21-6.—Tobacco placed under predetd. temp. and humidity conditions tends to attain an equil. with the surrounding air characterized by the equation $A = a - b \sqrt{100 - \varphi}$, where A is the hygroscopicity of the absolutely dry tobacco, and φ the relative amt. of humidity of the air. The kinetics of the humidification or of the drying of tobacco depend entirely upon the temp. and the difference in the partial pressure of the water vapor in the surrounding air and above the leaf of tobacco. A definite humidity of the tobacco corresponds to each state of the air, i. e., the tobacco may absorb or release moisture. A. A. Nochtlingk</p> </div>																			
<div style="display: flex; justify-content: space-between;"> ASR.SLA METALLURGICAL LITERATURE CLASSIFICATION 6-2-12 </div>																			
REGIONAL DIVISION										REGIONAL DIVISION									
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MATERIALS										MATERIALS									

COMMON ELEMENTS		COMMON VARIABLES INDEX	
MATERIALS INDEX		PROCESSES AND PROPERTIES INDEX	
<p>The absorptive power of tobacco and the humidification process. N. G. Gladkov and N. A. Trankvilitskaya. <i>Tabachnaya Prom.</i> 1933, No. 3, 23-30.--All the varieties of tobacco investigated tended, at 18-20° and 100% relative humidity, to acquire the same absolute humidity of 45%, which remained const. until mildew appeared. Thus within relative humidity of 40-100% and at 18-20° the equil. is detd. as follows: $A = 45 - 5(100 - \varphi)^{1/2}$, and at 0.50% humidity $A = 10 - (50 - \varphi)^{1/2}$, where A = the absorptive power in percentage of the tobacco at the relative humidity of the air φ. The humidity should be maintained in the picking department at 70-85, in the crushing department at 70-85, in the cigaret department at 65-70 and in the shipping department at 60-65%. Heat is generated in the processes of humidification (diln. of gels) of the tobacco; this heat accumulates in the tobacco because of the low thermal cond. The diln. velocity of the gels is higher the further it is from the state of equil.; therefore the greater heating of the tobacco the more moisture is absorbed in an attempt to reach an equil. The heat of adsorption is evolved until the gel becomes said. The burning of moist tobacco in bales is caused by microbiological processes. The action of high temps. on the tobacco, probably affects the dispersion ability of the gels, causing a decrease or a complete disappearance of the colloidal properties in tobacco. The humidification of normal tobacco in bales takes place in accordance with the laws of diffusion.</p> <p style="text-align: right;">A. A. Bruchtelink</p>		<p>17</p>	
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION			
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SUBJECT		CLASSIFICATION	

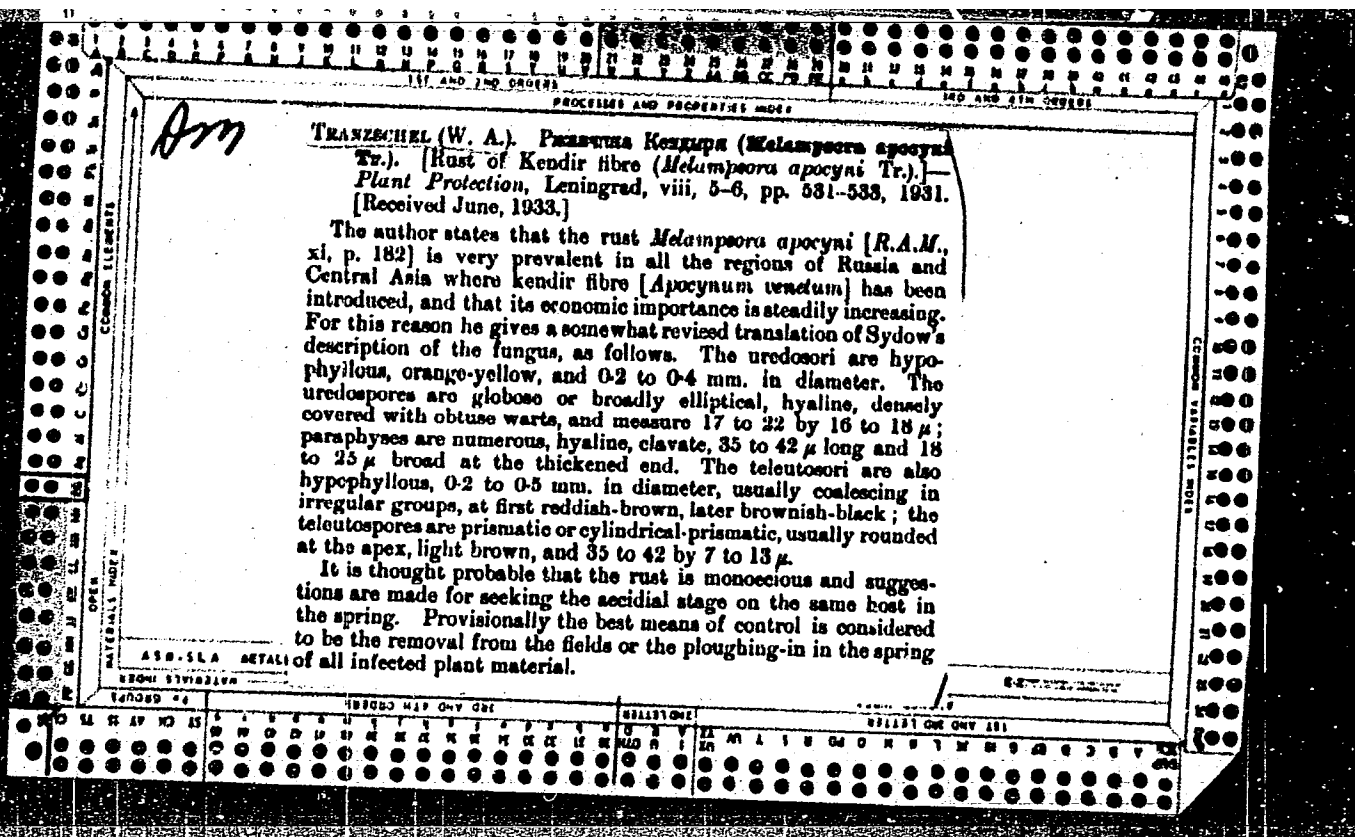
TRANOVICH, Vikentiy Valerianovich; KAS'YANOVA, L., red.; FILIPPOVA, E.,
red. izd-va; LEBEDEV, A., tekhn. red.

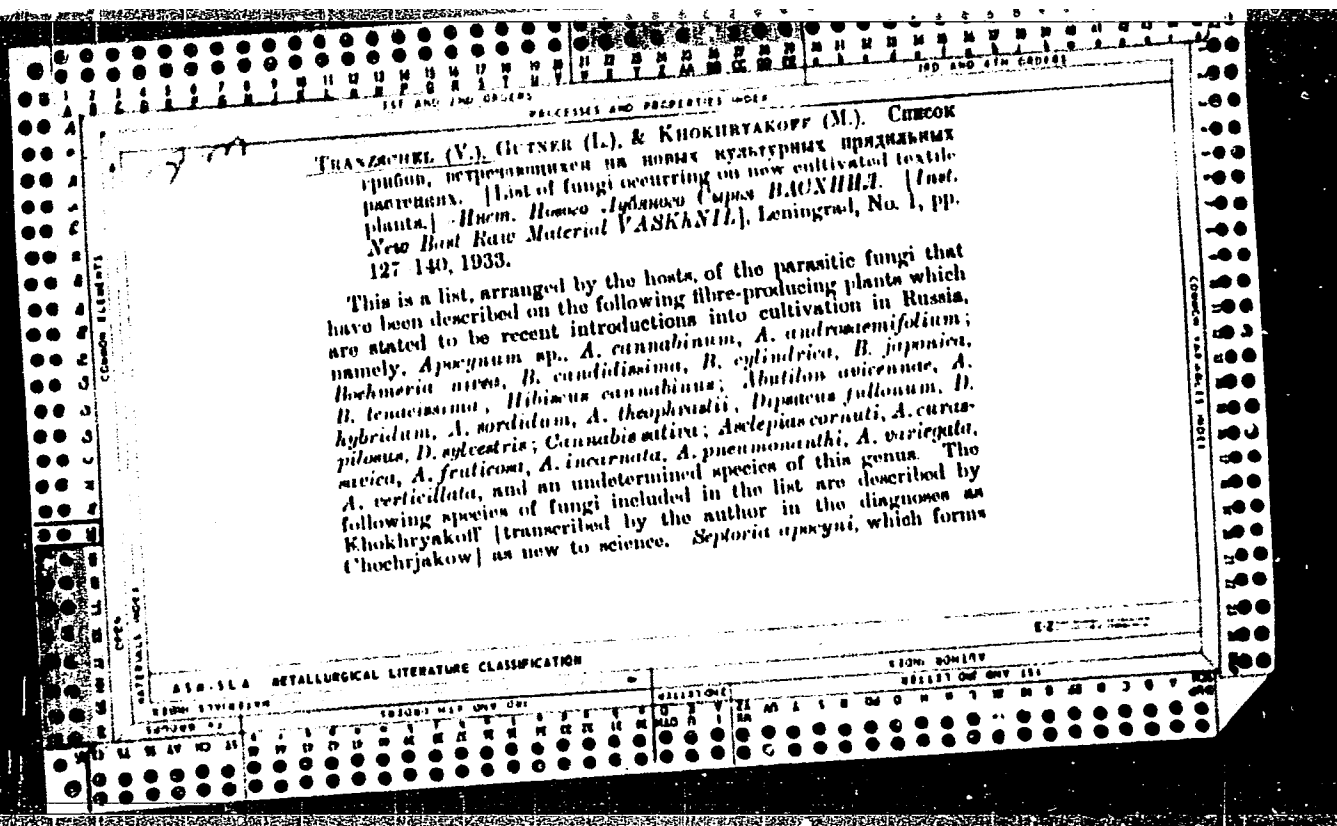
[Payments to the budget from the receipts of amusement
enterprises] Platezhi v biudzhët s vyruchki zrelishchnykh pred-
priatií. Moskva, Gosfinizdat, 1962. 68 p. (MIRA 15:6)
(Amusements--Taxation)

TRANSHEL', V. G.

"On the Relationship of Aecidia on Barberry to Puccinia pygmaea Erikss,"
Comptes Rendus (Doklady) de l'Academie des Sciences de l'URSS, vol. 1, 1931,
pp. 45-48. 511 P444.

So: Sira - Si-90-53, 15 Dec. 1953





on the stems of *A. tridactylum* whitish, oblong or oval, rarely discrete spots; the perithecia are brown, 150 to 200 μ in diameter, and contain four-celled stylospores, measuring 25 to 46 by 3 to 4 μ . In association together and with other fungi on the leaves of *B. nivea* were found the three new species *Conothyrium lachneriae* with perithecia up to 50 μ in diameter and fuliginous, continuous stylospores measuring 6 to 7.5 by 3 μ ; *Hederomyces lachneriae* with perithecia up to 77 μ in diameter and four-celled, fuliginous stylospores measuring 13 to 15 by 4 to 5 μ ; and *Microthyrium lachneriae* with perithecia up to 80 μ in diameter and two-celled, fuliginous perithecia measuring 7 to 9 by 3 to 3.5 μ . *Ascochyta hibernica* n. sp. formed on the leaves of *H. cuneata* amphitemous, greyish-brown, rounded, sharply delimited spots, up to 10 mm in diameter; the perithecia are epiphytic, light brown, up to 180 μ in diameter, and the stylospores hyaline, cylindrical, rounded at both ends, first continuous, later two-celled, and 5 to 10 by 2.5 to 4.5 μ . *Conothyrium obtusum* n. sp. forms on the leaves of *A. acuminata* greyish-brown or ochre-coloured spots, up to 5 mm in diameter, with an indistinct dark margin; the perithecia are epiphytic, dark brown, more or less aggregated or dispersed, and 50 to 150 μ in diameter, containing elliptical, fuliginous stylospores measuring 6 to 7 by 3 to 3.5 μ . *Leptophlebia obtusum* forms on the leaves of the same host small greyish-brown spots with a dark margin, and occurs in association with *Ascochyta obtusum*; its perithecia are dark brown, occasionally aggregated, and 50 to 150 μ in diameter, with asci 55 to 62 by 9 to 12 μ , and elliptical, straight or bent, 24 to 30 by 4.5 μ . *M. obtusum* n. sp. occurred also on the leaves of this host on which it forms whitish spots with a thin dark margin; the perithecia are 75 to 150 μ in diameter, and have thin translucent walls, and the stylospores are two-celled, slightly constricted, fuliginous (brown in mass), and measure 6 to 8 by 3 to 3.5 μ . A fuller description of these fungi

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PROCESSING AND PROPERTY INDEX	
1ST AND 2ND INDEXES	3RD AND 4TH INDEXES
<p>TRANZSCHKE (V.). Промежуточные хозяева ржавчины злаков и их распространение в СССР. [Alternate hosts of cereal rusts and their distribution in U.S.S.R.]—<i>Bull. Pl. Prot. Leningr., Ser. II (Phytopath.)</i>, 1934, 5, pp. 4-40, 1934. [German summary.]</p> <p>In this paper the author gives a summarized account of the work done up to date both abroad and in Russia in the search for alternate hosts of the rusts of cultivated cereals. He gives an exhaustive descriptive list of the species of barberry which have so far been found to harbour <i>Puccinia graminis</i> in the U.S.S.R., with their geographical distribution. In a comprehensive review of experimental work, mainly abroad, on the transmissibility of crown rust (<i>P. coronifer</i> Nees) [<i>P. helii</i>] from oats to other Gramineae and vice versa, he concludes that the form specialized on oats can only attack other species besides oats and wild oat grasses under favourable experimental conditions. An annotated list is given of the species of <i>Rhynchospora</i> which occur in Russia, indicating those on which rust aecidia have been found, though their pathogenicity to oats has not been tested from many species; <i>R. dahurica</i> and <i>R. pallasi</i>, which are very widespread throughout the U.S.S.R., require further testing.</p> <p>A detailed account is given of Main's and Jackson's experiments in the United States [<i>R.A.M.</i>, xii, p. 499] on the aecidial stage of brown wheat rust [<i>P. tritici</i>] on species of <i>Thalictrum</i>, and of Kromeyeva's experiments in Russia in 1926 [cf. <i>ibid.</i>, v, p. 25] in successfully infecting</p>	<p>over</p>

with teleutospores from wheat *T. callatum*, *T. spicatum*, *T. rubens*, *T. ruthenicum*, *T. tuberosum*, *T. corymbellum*, *T. elatum*, *T. adhaesivum*, and *T. minus*, and back inoculating from the aecidia to *Triticum vulgare*, *T. durum*, *T. spelta*, and rye, but not to barley. Kromeyeva's *Thalictrum* plants, however, were grown from seed imported from Turin and Kew, and since there is a distinct possibility of hybridization of the species when cultivated in botanic gardens, this may explain certain discrepancies between her results and those obtained in America, where *T. minus* was found not to be susceptible. A complete list is given of the species of *Thalictrum* occurring in Russia, many of which have not yet been tested for their susceptibility to *P. tritici*, as well as a summary of experiments to determine the transmissibility of the rust to other Gramineae, in which the author readily succeeded in infecting *Aegilops crassa* and *A. cylindrica* with uredospores from wheat.

Among the Russian species of *Achusa*, the alternate host of brown rust of rye (*P. dispersa*) [*P. aculina*], an annotated list of which is given, aecidia have been found on *A. officinalis*, *A. gmelini* growing mixed with the wild grass *Secale fragile*, and *A. ochroleuca*. Aecidia were also found on *A. myosotidiflora*, but are not believed to belong to this rust. In dealing with the Russian species of *Ornithogalum* (which are arranged according to a new unpublished revision of the genus by H. Krasheninnikoff), the alternate host of brown barley rust (*P. anomala*), the author states that in 1926 in the Crimea he successfully inoculated *O. fim-*

AM

bratum and *O. narbonensis* with teliospores from rusted barley straw. A brief reference is also made to his success in 1906 in infecting *Oxalis corniculata* with teliospores of maize rust (*P. maydis*) and returning the rust from *O. corniculata* to maize. Aecidia of the rust have apparently not yet been observed in nature on species of *Oxalis* in the U.S.S.R., where two, *O. stricta* and *O. corniculata*, are widely distributed.

In the last section the author discusses at some length the reasons which lead him to believe that the aecidia of *Uredium valerianellae* Biv. which are abundantly found on species of *Valerianella* in the Crimea and Caucasus belong to *P. glumarum*.

ASIA S.A. METALLOGICAL LITERATURE CLASSIFICATION

TRANSHEL', V. G.

"Puccinia cynodonti, a Rust Fungus Pathogenic on Many Hosts." Sovetskaja
Botanika, no. 1, 1935, pp. 108-111. 450 So8

So. Sira - Si-90-53, 15 Dec. 1953

TRANSHEL', V. G.

"On the Biology of Rust Funge from the Far East," Trudy Botanicheskogo Instituta Akademii Nauk SSSR, Seriya 2: Sporovye Rasteniia, no. 4, 1938, pp. 323-344.
451 Sa21P

So: Sira - S1-90-53, 15 Dec. 1953

7 1 1 M
TRANZCHEL (W [V]). *Conspectus Uredinalium U.R.S.S.* - 426 pp., 37 figs., Leningrad: published by the Academy of Sciences of the U.S.S.R., 1939. Roubl. 19 Kop. 20 (bound Roubl. 21 Kop. 70).

This monograph opens with a few introductory chapters (pp. 7-57) on the development, taxonomy and nomenclature, host relationships, and geographical distribution of the rust fungi. These are followed by a list of the rusts recorded in the U.S.S.R. (pp. 61-404), together with a certain number of foreign species (given in square brackets) which might be found in the Union later on, as their hosts are present in the country. The rusts are listed first under the hosts arranged according to the natural orders, the localities being indicated, and following each order an annotated list is given of the rusts parasitic on it. A number of species regarded as new are described [with Latin diagnoses] and various new combinations made. The work constitutes a valuable addition to the Russian literature on the rusts.

TRANSHEL', V. G.,

"Rust Fungi of the Genus *Tranzschelia* Arth. on *Prunus*," Botanicheskii Zhurnal
SSSR, vol. 24, 1939, pp. 247-253. 451 R923

So: Sira - Si-90-53, 15 Dec. 1953

TRAN

TRANZSCHER (V. G.). К биологии ржавчинных грибов Дальнего-Восточного края. [On the biology of rust fungi from the Far East.]—*Acta Inst. bot. Acad. Sci. U.R.S.S.*, 1939, Ser. II (Pl. Crypt.), pp. 323-344, 1940. [German summary.]

This list of 27 species of rusts, including four new to science and one re-named, is based on material collected by the author in 1927 and 1929 in the southern parts of the Far Eastern region of the U.S.S.R.

VERO, Jozsef, dr., akadémikus, tanszékvezető egyetemi tanár; 1. MTA, Ferenc,
egyetemi tanársegéd

Effect of nitrogen on some properties of the MTA 50 steel. Koh
lap 97 no.8:353-359 Ag '64.

TRANTA, Ferenc, egyetemi tanarseged

Annealing high-speed steels. Koh lap 95 no.11:502-505 H '62.

1. NME Metallografiai Tanszek.

SOLYOM, Jeno; TRANTA, Ferenc

Examination of the primary recrystallization of acidproof
steels. Muszaki kozl MTA 32 no.1/4:199-212 '63.

1. Nehezipari Muszaki Egyetem Metallografiai Tanszeke,
Miskolc.

VERO, Jozsef, dr., akademikus; TRANTAPÉ SZIKSZAI, Marta

Studying the phase changes of steels by a dilatometer. Koh lap 95
no.9:398-402 S '62.

1. Nehezipari Muszaki Egyetem Metallografiai Tanszek.

TRANTARIC, Milan, inz.

Contribution to the calculation of deflection influence lines.
Inz stavby 13 no.1:22-25 Ja '65.

1. Institute of Building Technology and Testing, Worksite
Zilina.

KUDRYAVTSEV, P.M.; TRANTIN, V.I.

Flushing of the cooling system of rectifiers with an inhibited acid. Elek. i tepl. tiaga no.5:16-17 My '63. (MIRA 16:8)

1. Nachal'nik 16-go uchastka energosnabzheniya Moskovskoy dorogi (for Kudryavtsev).
2. Nachal'nik tyagovoy podstantsii Krivandino (for Trantin).

(Electric current rectifiers--Cooling)

KUDRYAVTSEV, P.M.; TRANTIN, V.I.

Flushing of the cooling system of rectifiers with an inhibited acid. Elek. i tepl. tiaga no.5:16-17 My '63. (MIRA 16:8)

1. Nachal'nik 16-go uchastka energosnabzheniya Moskovskoy dorogi (for Kudryavtsev).
 2. Nachal'nik tyagovoy podstantsii Krivandino (for Trantin).
- (Electric current rectifiers—Cooling)

BCS

Henry Clayman

515. New methods in brick manufacture.---L. TRANTINA (Stavico, 28, 116, 1930).
The backwardness of Czechoslovakian brickmaking is discussed and methods of
rationalization and improvement in the making of bricks developed in W. Europe
and U.S.A. are described and their adoption is recommended.

TRANTINA, L.

Production prerequisites for the development and improvement of modern elements and parts. Stavivo D no.12:460 461 D '64.

1. Technical and Testing Institute of Building, Worksite Brno.

PODLUBNAYA, Ye.T.; TRANTSEVA, G.S.

Purification of vodka by activated carbon, and a control of the process based on the difference in oxidizability between vodka and the refined product. Trudy TSNIISP no.7:153-161 '59.

(MIRA13:9)

(Vodka) (Oxidation) (Production control)

VESELOV, V.T.; TRANTSEYEV, Yu V

International contacts of the Institute of the Peoples of Asia.
Vest. AN SSSR 31 no.12:111-112 D :61. (MIRA 14:12)
(Russia--Relations (General) with Asia)
(Asia--Relations (General) with Russia)
(Oriental studies)

TRANULIS, S.

TRANULIS, S. A turning point in the life of working people. p. 1.

Vol. 9, no. 304, Jan. 1957

CONSTRUCTORUL

TECHNOLOGY

ROMANIA

So: East European Accession, Vol. 6, No. 5, May 1957

TRANULIS, S.

A new factory; leading in the sector. p. 2.
(CONSTRUCTORUL. Vol. 9, no. 373, Mar. 1957, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

TRANYANTS, S.

~~Workers' inspection.~~ Sov.profsciuzy 4 no.10:33-34 0 '56. (MLRA 9:11)
(Restaurants, lunchrooms, etc.)

H-17

Country : BULGARIA *Tranzhafilov, T.*
 Category : Chemical Technology. Pharmaceuticals . Vitamins.
 Antibiotics
 Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 50676
 Author : Tranzhafilov, T; Boyadzhiev, M.; Penova, M.*
 Institute : -
 Title : The Extraction Dynamics in the Maceration
 Techniques
 Orig Pub. : Farmatsiya (Bulg.), 1958, 8, No 2, 28-29
 Abstract : Extraction processes, in general, are based on
 distribution and diffusion. Among the extr-
 action methods employed the maceration tech-
 nique, conducted in a state of relatively
 static phase conditions, is the most unrealis-
 tic one since it yields very small quantities
 of the extracted material (medicinal prepara-
 tion). This is explained by insufficient inter-
 *Milev, M.
 Card: 1/5
 H-74

Country	:		H-17
Category	:	Chemical Technology.	
Abs. Jour	:	Ref Zhur-Khimiya, No 14, 1959, No 50676	
Author	:		
Institute	:		
Title	:		
Orig Pub.	:		
Abstract	:	change between the phases. The present day technique involving galenical type of preparations seeks new ways, by means of which the maceration techniques be sufficiently modified to attain higher yields in the extraction of medicinal preparations. The experimentation was conducted with the purpose of establishing limits of maximum yield and of maceration. Time of contact between the phases was a function of solvent nature (water,	
Card:	:	2/5	
Country	:		H

Country :
Category : Chemical Technology.

Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 50676

Author :
Institute :
Title :

Orig Pub. :

Abstract : alcohol 40-60%), temperature, relative stag-
nancy of a system, and of degree of mechani-
cal agitation determined at two different
Con'd temperatures. Experiments were conducted
employing leaves of belladonna. For the pur-
pose of finding a suitable solvent, capable
of extracting maximum quantities of active
components, water and 40-70% alcohol were
tried separately. It was established that
temperature of 60° has a positive effect on

Card: 3/5

H-75

Country	:		H-17
Category	:	Chemical Technology.	
Abs. Jour	:	Ref Zhur-Khimiya, No 14, 1959, No 50876	
Author	:		
Institute	:		
Title	:		
Orig Pub.	:		
Abstract	:	the rate of diffusion of the extraction process; at the same time, the maceration contact time between the two phases is noticeably reduced. Violent mechanical agitation conducted at 60° temperature reduces the maceration contact time between the phases, resulting in insuring maximum yield of extracted alkaloids from belladonna leaves. Among the solvents used, 40% alcohol was found to be the most suitable for the extraction of large quantities of medicinal substances for the shortest	
Card:		4/5	
Country	:		H-17

H-17

Country :
Category : Chemical Technology.

Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 50676

Author :
Institute :
Title :

Orig Pub. :

Abstract : contact time between the phases. --
Con'd --M. Kaminskaya

Card: 5/5

H-76

TRAPAIIDZE, A. S. Cand Agr Sci -- "Study ^{of} ~~the~~ the sowing qualities of ~~seeds of~~
Grecian laurel ^{Δελ} for the purpose of establishing a standard." Tbilisi, 1960.
(Min of Agr Georgian SSR. Georgian Order of Labor Red Banner Agr Inst).
(KL, 1-61, 203)

-320-

TRAPAIÐZE, D.L.

Use of the reaction of complement fixation for studying the
antigenic structure of the principal representatives of microbes
of the group Salmonella. Soob. AN Gruz. SSR 33 no.3:651-654
Mr '64 (MIRA 17:8)

Subsequent to
TRAPAINZE, L.T., Cand Tech Sci -- (diss) "Problems of trains
~~traffic~~ on steep ^{down}slopes in the ~~case of~~ electric traction."
Tbilisi, 1959, 16 pp with graphs (Tbilisi Inst of Engineers
of Railroad Transportation im V.I. Lenin) 200 copies
(KL, 34-59, 115)

ABELISHVILI, L.G.; TRAPIDZE, L. T.; PICHKHADZE, I.P.

Study of the carrying capacity of electric railroads taking into account traction current supply systems. Soob. AN Gruz. SSR 31 no. 3:661-668 S '63. (MIRA 17:7)

1. Grusizskiy politekhnicheskoy institut imeni Lenina.
2. Chlen-korrespondent AN GruzSSR (for Abelishvili).

ABELISHVILI, L.G.: TRAPAIÐZE, L.T.

Magnitudes of the preparatory time and braking force in the braking
of freight trains. Soob. AN Gruz. SSR 21 no.1:77-82 J1 '58.
(MIRA 11:10)

1. Tbilisskiy institut inzhenerov zheleznodorozhnogo transporta im.
V.I. Lenina. Predstavleno akademikom K.S. Zavriyevym.
(Railroads--Brakes)

TRAPIDZE, M. (Tbilisi)

Review of well newspapers. Prom. koop. no.12:35 D '57. (MIRA 10:12)
(Georgia--Wall newspapers)

TRAPER, Ye.I., inzh.

Mounting and delivery of a direct current electric propulsion plant on 5000-ton capacity ships. Trudy NTO sud.
prom. 8 no.5:117-129 '59. (MIRA 13:7)
(Ship propulsion, Electric)

YAKOVLEV, Georgiy Semenovich; ~~TRAPER~~, Ye.I., inzh., retsenzents; CHEKUNOV,
K.A., inzh., retsenzents; BOYTSOV, A.Ye., nauchnyy red.; CHICHKANOVA,
V.S., red.; ERASTOVA, N.V., tekhn. red.

[Marine electric power systems] Sudovye elektroenergeticheskie siste-
my. Leningrad, Gos.soiuznoe izd-vo sudostroitel.promyshl., 1961. 351 p.
(MIRA 14:12)

(Electricity on ships)

TRAPER, Ye.I.

Development of electric power systems of seagoing transport
vessels. Sudostroenie no.11:50-55 N '65 (MIRA 19:1)

1. 29977-65

ACC NR: AP6014742 (N) SOURCE CODE: UR/0229/65/000/011/0050/0055

AUTHOR: Traper, Ye. I.

ORG: None

TITLE: Development of electric power systems of sea transport ships

SOURCE: Sudostroyeniye, no. 11, 1965, 50-55

TOPIC TAGS: shipbuilding engineering, marine engineering, electric power engineering, marine equipment, *POWER PLANT*

ABSTRACT: A general review of the progress made in marine power applications during the past 40 years is presented. The development of power plants installed on oil tankers and cargo ships are characterized by an exclusive use of direct current before the World War and by the introduction of alternating current during the postwar period. The increase of installed power capacities is shown in a table comparing the capacities of various individual oil tankers and cargo ships built before and after the World War. It is mentioned that the installed capacity on large transport ships attains 1900 kw. The application of various a-c equipment is discussed including the use of 1000-kw alternators, 100 kva transformers, 100 kw induction motors and auxiliary

Card 1/2

UDC: 629.12-83

ACC NR: AP6014742

equipment. About seventy 11570-ton oil tankers of "Kazbek" series were built between 1951-1959. They were equipped with a 540-kw, 220-v, 50-cps power plant. Since 1959, a 380-v, 3-phase current is used for power circuits including tankers of "Praga" type and cargos of "Leninskiy Komsomol" series. In general, 380/220-v systems are standardized and uniformly used for new power installations. Turbo-generators and diesels are used as prime movers of 500, 750 and 1500 rpm. A 300-kw, 400-v, 500-rpm alternator used for tankers of "Sofiya" type is shown in a photo. A schematic diagram of principal connections and a photo of control desk are also presented. Various circuits are reviewed and their equipment briefly described including emergency lighting and other auxiliary circuits. Current and voltage relay protective arrangements, control and measurements, synchronizing, signaling and other circuits used for operations of power plants are examined. Photos of portable flashlights used for maintenance and inspection are also included. It is mentioned that 49000-ton tankers of "Sofiya" type are equipped with two 750-kw turbogenerators and one 300-kw diesel-alternator while the new 6000-ton motor ship of "Vytegrales" series (used for transportation of timber) has a power plant consisting of three 200-kw diesel-alternators.

SUB CODE: 09, 10, 13/ SUBM DATE: None

Card

2/2

ca

20

A new method for the determination of porosity in structural materials. M. A. Reshetnikov and A. P. Traganov. *From. Stroitel. Material.* 1941, No. 5, 5-10; *Chem. Zentr.* 1942, II, 2837. The authors describe a new method and the app. used to det. the porosity, especially in water-repellent material. Essentially, a vessel is used which is similar to a pycnometer in which the material is introduced. The tests are made by addn. of Hg and with varying air pressure; both are measured. I. M. Noy

TRAPPEZIN, I. I.

Prochnost' metallov pri prerenennoy nagruzke (Strength of Metals under alternating loads) Moskva, Gos. Izd-vo Tekhniko-Teoreticheskoy Literatury. 1948.
60 p. Illus., Diagra.

T.P. Missing

Continued on MIC. Misc. 1128

SO: MIC.

Misc.

.1127C

TRAPEZIN, I. I.

Prochnost' metallov pri peremennoi nagruzke. Pod red. S.V. Serensena. Moskva, Gostekhizdat, 1948. 106 p. diags.

Bibliography: p. 106-107.

Strength of materials under variable loads.

DLC: TA460.T7

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

BAYKOV, V.T.; BOLKHOVITINOV, V.F., prof., retsenzent; TRAPEZIN, I.I.,
dots., retsenzent; ROMASHEVSKIY, A.Yu., otv. red.; YERMAKOV,
M.M., tekhn. red.

[Structural mechanics for airplanes] Stroitel'naya mekhanika sa-
moleta. Moskva, MAI. Pt.1. [Statically determinate rod systems]
Sticheski opredelime sterzhnevye sistemy. 1950. 228 p.

(MIRA 15:1)

(Structures, Theory of)
(Airplanes--Design and construction)

TRAPEZIN, I.I.

SERENSEN, S.V.; KOGAYEV, V.P.; KOZLOV, L.A.; SHNEYDEROVICH, R.M.; RESHETOV,
D.N., doktor tekhnicheskikh nauk, professor, retsenzent; TRAPEZIN,
I.I., kandidat tekhnicheskikh nauk, redaktor; KARGANOV, V.G., inzhener,
redaktor graficheskikh rabot; POPOVA, S.M., tekhnicheskii redaktor

[Bearing capacity and strength calculations of machine parts]
Nesushchaia sposobnost' i raschety detalei mashin na prochnost'.
Pod red. S.V.Serensena. Moskva, Gos. nauchno-tekhn. izd-vo mashino-
stroitel'noi lit-ry, 1954. 208 p. (MLRA 8:4)
(Strength of materials) (Machinery) (Strains and stresses)

7 KAPEZIN, I.I.

ANDREYEV, L.Ye., kandidat tekhnicheskikh nauk; BIDERMAN, V.L., kandidat tekhnicheskikh nauk; BOYARSHINOV, S.V., kandidat tekhnicheskikh nauk; VOL'MIR, A.S., doktor tekhnicheskikh nauk; DIMENTBERG, F.M., kandidat tekhnicheskikh nauk; ZASELATELEV, S.M., inzhener; KINASOSHVILI, R.S., doktor tekhnicheskikh nauk, professor; KOVALENKO, A.D.; MAKUSHIN, V.M., kandidat tekhnicheskikh nauk; MALININ, N.N., kandidat tekhnicheskikh nauk; PONOMAREV, S.D., doktor tekhnicheskikh nauk; PRIGOROVSKIY, N.I., doktor tekhnicheskikh nauk; TETEL'BAUM, I.M., kandidat tekhnicheskikh nauk; UMANSKIY, A.A., doktor tekhnicheskikh nauk, professor; PHODOS'YEV, V.I., doktor tekhnicheskikh nauk; SERENSEN, S.V., redaktor; TRAPEZIN, I.I., kandidat tekhnicheskikh nauk, redaktor; KARGANOV, V.G., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskij redaktor.

[Mechanical engineer's manual; in 6 volumes] Spravochnik mashinostroitel'ia; v shesti tomakh. Izd.2-e, ispr. i'dop. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, Vol.3, 1955. 563 p.
(Mechanical engineering) (MLRA 8:12)

ТРАПЕЗИН, И.И.

BAYKOV, V.T., kandidat tekhnicheskikh nauk [deceased]; LOPOVOK, B.N.,
kandidat tekhnicheskikh nauk; ТРАПЕЗИН, И.И., kandidat tekhnicheskikh
nauk.

Bending of oblique-angled plates. Trudy MAI no.69:3-10 '56.

(MLRA 10:1)

(Elastic plates and shells) (Flexure)

LOPOVOK, B.N., kandidat tekhnicheskikh nauk; TRAPEZIN, I.I., kandidat tekhnicheskikh nauk.

Stability of parallelogram plates with fixed edges during stress beyond the proportional limit. Trudy MAI no.69:39-50 '56.

(MIRA 10:1)

(Elastic plates and shells)

TRAPETZIN, I.I., kandidat tekhnicheskikh nauk.

Stability of structural orthotropic thin-walled conical shell
subjected to uniform external pressures. Trudy MAI no.69:59-71
'56. (MLRA 10:1)
(Elastic plates and shells)

TRAPEZIN, I. I.

1A(10)

PHASE I BOOK EXPLOITATION

BOV/1577

Rascheti na prochnost' teoreticheskiye i eksperimental'nyye
issledovaniya prochnosti mashinostroitel'nykh konstruktov. Sbornik statey,
vyp. 3. (Calculations for Strength; Theoretical and Experimental Research on
the Strength of Elements Used in Machine Construction. Collection of Articles,
Vol. 3) Moscow, Mashgis, 1958. 355 p. 4,000 copies printed.

Ed.: Tarabasov, N.D., Doctor of Technical Sciences; Editorial Board:
Tikhomirov, Ye.M., Honored Worker of the KUDR in Science and Technology,
Professor (Chairman); Serensen, S.V., Active Member, Ukrainian SSR Academy of
Sciences, Doctor of Technical Sciences, Professor; Glushkov, G.S., Doctor of
Technical Sciences, Professor; Ponomarev, S.D., Doctor of Technical Sciences,
Professor; Sokolov, S.N., Doctor of Technical Sciences, Professor; Tarabasov, N.D.,
Doctor of Technical Sciences, Professor; and Makushin, V.M., Candidate of Tech-
nical Sciences, Docent (Secretary); Tech. Ed.: Tikhomirov, A.Ye., Managing Ed.
for Literature on General Technical and Transport Machine Building (Mashgis);
Ponomareva, K.A., Engineer.

PURPOSE: This collection of articles is intended for engineers and designers
working in the field of machine construction, for research fellows, and
scientific workers.

COVERAGE: The collection is an inter-vus publication of transactions concerning
strength problems. It contains original reports on calculations for a number
of structures used in machine building and their components. Considerations
are given to calculations of the columns of hydraulic presses, the nonlinear
theory of spiral springs, problems in the calculation of rubber components,
theoretical and experimental investigations of circular plates of constant
and variable stiffness, investigations of conical shells and of stressed
assemblies of machine components. Calculations in the elasto-plastic domain
are represented by an investigation of forced fits of discs and the creep of
operating turbine blades. Problems of contact in the case of impact and the
stability theory of elastic systems "in general terms" are considered. There
are 114 references, 99 of which are Soviet, 9 English, 4 German, 1 French,
1 Polish.

Ventskovskiy, B.M., Candidate of Technical Sciences. Bending of Annular
and Circular Plates on a Generalized Elastic Basis With Simultaneous
Action of Transverse and Radial Forces

133

Trapezin, I.I., Candidate of Technical Sciences, Docent. Ultimate De-
formations of a Conical Shell With a Small Slope Angle, Loaded With
a Uniform Hydrostatic Pressure

151

Assemblies of Machine Components and Their Calculation

TRAPEZIN, I. I., Candidate of Technical Sciences.

"On Small Vibrations of a Circular Thin-walled Conical Shell"

p. 334

Calculations for Strength; Theoretical and Experimental Research on the
Strength of Elements Used in Machine Construction. Collection of Articles,
Vol. 2, Moscow, Mashgiz, 1958, 360pp.

SERENSEN, Sergey Vladimirovich; SHNEYDEROVICH, Roman Mironovich; GROMAN, Mikhail Borisovich; RESHETOV, D.M., prof., doktor tekhn.nauk, retsenzent; TRAPEZIN, I.I., dotsent, kand.tekhn.nauk, red.; DANILOV, L.N., red.izd-va; MODEL', B.I., tekhn.red.

[Shafts and axles; design and construction] Valy i osi; raschet i konstruirovaniye. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1959. 253 p. (MIRA 13:3)
(Shafting)

TRAPEZIN, I. I. Doc Tech Sci -- (diss) ^{Design} ~~Calculation~~ of thin-walled structures
of the conic-shell type ^{on the basis of} ~~with respect to~~ stability and vibrations." Mos, 1959
12 pp (Min of Higher and Secondary Specialized Education RSFSR. Mos Order of
Lenin Aviation Inst im Sergo Ordzhonikidze), 160 copies (KL, 43-59, 123)

TRAPEZIN, I.I., kand.tekhn.nauk

Vibrations of a circular thin-walled conic shell. Rasch.na
prochn. no.4:367-373 '59. (MIRA 13:4)
(Elastic plates and shells--Vibration)



FEODOS'YEV, Vsevolod Ivanovich; TRAPEZIN, I.I., red.; GAVRILOV, S.S.,
tekhn.red.

[Strength of materials] Soprotivlenie materialov. Moskva, Gos.
izd-vo fiziko-matem.lit-ry, 1960. 536 p.

(MIRA 14:1)

(Strength of materials)

TRAPEZIN, I.I., dotsent, kand.tekhn.nauk

Stability of a thin-walled conical shell closed at the top and
subjected to the action of lateral hydrostatic pressure. Rasch.na
prochn. no.5:249-258 '60. (MIRA 13:7)
(Elastic plates and shells)

10.7080

33394
S/572/60/000/006/012/018
D224/D304

AUTHORS: Lopovok, B. N., Candidate of Technical Sciences, Docent,
and Trapezin, I. I., Doctor of Technical Sciences, Do-
cent

TITLE: Some partial cases of stability of parallelogram-shaped
plates in case of non-linear dependence between stresses
and deformations

SOURCE: Raschety na prochnost'; teoreticheskiye i eksperiment-
tal'nyye issledovaniya prochnosti mashinostroitel'nykh
konstruktsiy. Sbornik statey. No. 6, Moscow, 1960,
182-189

TEXT: The authors consider the case of a plate as above, freely
supported at two opposite edges and clamped at two other edges,
uniformly compressed in the direction parallel to the freely sup-
ported edges. In a previous publication the authors deduced a dif-
ferential equation of the fourth order for this problem which is
quoted. Boundary conditions are established. The solution is looked

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some partial cases of ...

for in the form

$$W = f(\xi) \sin \frac{\eta \eta}{b_1}$$

(6)

ξ and η being non-orthogonal coordinates, and $f(\xi)$ is determined from a characteristic equation. Coefficients calculated for the parallelogram angle $\alpha = 40^\circ$ are given in tables; those for $\alpha = 90^\circ$ are compared with values obtained by other authors. There are 5 figures, 4 tables and 4 Soviet-bloc references.

Card 2/2

33396

S/572/60/000/006/014/018
D224/D304

10.8100

AUTHOR: Trapezin, I. I., Doctor of Technical Sciences, Docent
TITLE: Experimental determination of the magnitude of critical pressures for conical shells
SOURCE: Raschety na prochnost'; teoreticheskiye i eksperimental'nyye issledovaniya prochnosti mashinostroitel'nykh konstruktsiy. Sbornik statey. No. 6, Moscow, 1960, 217-230

TEXT: Several types of shells were tested (closed, truncated; one with circular ribs). The testing installation is described. Pressure curves were recorded by an oscillograph. When the shell lost its initial symmetric form of equilibrium, a sharp drop of pressure was observed; the critical pressure was determined as the magnitude of pressure before the drop. The results are given in form of tables and graphs and compared with those calculated according to three different formulae: 1) Those obtained by the author / Abstractor's note: Method not stated. /; 2) one obtained by solving the simplified

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Experimental determination of ...

S/572/60/000/006/014/018
D224/D304

fied differential equation of stability by the method of finite differences; 3) one obtained by solving the same equation by Galerkin's method. An attempt was made to determine the behavior of a conical shell with large aperture angle, subject to hydrostatic pressure. Recorded curves of pressure are given. There are 17 figures and 6 tables. X

Card 2/2

25826

S/535/60/000/130/001/007
E081/E335

10.6300

AUTHOR: Trapezin, I.I. Candidate of Technical Sciences
TITLE: Critical Load and Natural Vibrations of a
Constructionally Orthotropic Conical Shell, Clamped
at the Vertex and Loaded by a Uniform Hydrostatic
Pressure
PERIODICAL: Moscow. Aviatsionnyy institut. Trudy. No. 130,
1960. Prochnost' aviatsionnykh konstruktsiy.
pp. 5 - 18

TEXT: The paper is a continuation of previous work (Ref. 3 -
the author, Trudy MAI, No. 69, Oborongiz, 1956; Ref. 4 -
the author, Raschety na prochnost', Mashgiz, 1958). A conical
shell is considered, clamped at the vertex, strengthened by
numerous circular ribs and loaded by a hydrostatic pressure.
It is assumed that the ribs are rigid only in their plane, so
that the condition of the ribs does not influence the shear and
torsion of the shell. The differential equations governing the
stability are quoted from a previous paper of the author
(Ref. 3). These equations are solved by the Bubnov-Galerkin

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Critical Load

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E081/E335

X

method, subject to the boundary conditions corresponding to hinged support at the wide end of the cone with the hinge freely movable along the generators. A closed formula is obtained for the critical pressure and particular cases of it are derived. The differential equations governing the vibratory motion of the shell are set up using D'Alembert's principle, the equations of equilibrium and the components of inertial forces, and are quoted from the author's earlier paper. These equations are also solved by the Bubnov-Galerkin method to give a closed formula for the frequency of vibration. There are 2 figures and 4 Soviet references.

Card 2/2

S/124/62/000/009/024/026

A057/A101

AUTHORS: Lopovok, B. N., Trapezin, I. I.

TITLE: Some particular cases of stability of a plate with parallelogram form at non-linear dependence between stresses and deformations

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 9, 1962, 16, abstract 9V96
(In collection: "Raschety na prochnost'. v. 6", Moscow, 1960, 182 - 189)

TEXT: Based on the equations of the theory of small elastoplastic deformations, the problem is solved of the stability of thin parallelogram shaped plates, whose two edges are fastened and the two others free resting, under the effect of a uniform compression parallel to the resting edges. The solution is carried out by the variation method of V. Z. Vlasov. Diagrams are given for the critical stress for several angles of inclination of the edges in dependence of the relative thickness of the parallelogram shaped plate with four fastened edges. The solution of the last problem was obtained by the authors earlier (Tr. Mosk. aviats. in-ta, 1956, v. 69, 39-50 - Ref. Zhur. Mekh., 1957, no. 7, 8235).
[Abstracter's note: Complete translation] E. I. Grigolyuk

Card 1/1

AGAMIROV, V.L., kand. tekhn. nauk; AMEL'YANCHIK, A.V., inzh.;
 ANDREYEVA, L.Ye., kand. tekhn. nauk; BIDERMAN, V.L., doktor
 tekhn. nauk; BOYARSHINOV, S.V., kand. tekhn. nauk; VOL'MIR,
 A.S., prof., doktor tekhn. nauk; DIMENTBERG, F.M., doktor
 tekhn. nauk; KOSTYUK, A.G., kand. tekhn. nauk; MAKUSHIN, V.M.,
 kand. tekhn. nauk; MASLOV, G.S., kand. tekhn. nauk; MALININ,
 N.N., prof., doktor tekhn. nauk; PONOMAREV, S.D., prof. doktor
 tekhn. nauk; PRICOROVSKIY, N.I., prof., doktor tekhn. nauk;
 SERENSEN, S.V., akademik; STEPANOVA, V.S., inzh.; STRELYAYEV,
 V.S., inzh.; TRAPEZIN, I.I., prof., doktor tekhn. nauk;
 UMANSKIY, A.A., prof., doktor tekhn. nauk; FEODOS'YEV, V.I.,
 prof., doktor tekhn. nauk; SHATALOV, K.T., doktor tekhn. nauk;
 YUMATOV, V.P., kand. tekhn. nauk; BLAGOSKLONOVA, N.Yu., red.
 izd-va; YEVSTRAT'YEV, A.I., red. izd-va; SOKOLOVA, T.F.,
 tekhn. red.

[Manual for a mechanical engineer in six volumes] Spravochnik
 mashinistroitelia v shesti tomakh. Red. sovet N.S. Acherkan i
 dr. Izd.3., ispr. i dop. Moskva, Mashgiz. Vol.3. 1962. 651 p.
 (MIRA 15:4)

1. Akademiya nauk USSR (for Serensen).
 (Machinery--Design)

VOL'MIR, Arnol'd Sergeyevich. Prinimali uchastiye: TRAPEZIN, I.I.; --
KURSHIN, L.M.; SNITKO, I.K., red.; BRUDNO, K.F., tekhn. red.

[Stability of elastic systems] Ustoichivost' prugikh sistem.
Moskva, Fizmatgiz, 1963. 879 p. (MIRA 16:7)
(Elastic solids)

TRAPEZIN, I.I., doktor tekhn. nauk, prof.; KOL'YAN, E.R., prepodavatel'.

Free vibrations of a thin conical shell in a compressed gas
medium. Izv. vys. ucheb. zav.; mashinostr. no.5:58-66 '65.
(MIRA 18:11)

1. Moskovskiy stankoinstrumental'nyy institut.

L 00147-67 EWT(d)/EWT(m)/EWP(w)/LWP(w)/EWP(w) EWP(w) FM/WW

ACC NR: AT6015984

(N)

SOURCE CODE: UR/2572/65/000/011/0364/0377

AUTHOR: Trapezin, I. I. (Doctor of technical sciences)

ORG: none

TITLE: Stability of a conical shell under stress, over large limits of elasticity

SOURCE: Raschety na prochnost'. Teoreticheskiye i eksperimental'nyye issledovaniya prochnosti mashinostroitel'nykh konstruktsiy. Sbornik statey, no. 11, 1965, 364-377

TOPIC TAGS: shell theory, elasticity theory, conic shell, stability criterion, plastic deformation, SHELL STRUCTURE STABILITY

ABSTRACT: Simplified formulae are obtained describing the critical magnitude of the uniform external pressure on a conical shell under an arbitrary deformation law for the material. The linearized method of small elastic-plastic deformations is used to obtain the general equation of equilibrium. This is simplified to the case of elastic deformations for a conical shell, and a solution is obtained for a cone with a closed vertex and a cone on hinged supports. For the latter, the expression for the critical pressure is given by

$$p_k = 3,37E \left(\frac{h}{l_1} \right)^2 \lg \alpha \sqrt{\varphi_c(\xi_1) [\varphi_k(\xi_2)]^3} \sqrt{\frac{h}{l_1} \lg \alpha}$$

where the functions $\varphi_c(\xi_1)$ and $\varphi_k(\xi_2)$ are determined from a finite difference solution of the equilibrium equations. A numerical example is given to illustrate the analysis. Orig. art. has: 47 equations, 3 figures, and 1 table.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 004

Card 1/1 hs

TRAPEZIN, I.I., doktor tekhn.nauk

Stability of a stressed conic shell at high elastic limits.
Rasch.na prochn. no.11:364-377 '65.

(MIRA 19:1)

THE TWO COORDINATES OF PAIR POINTS
motion is given first. The displacement of the inertia of transverse

difference method for various special cases such as zero pressure or $\beta = \xi_1$
 $\sqrt{1/\xi_2^2} = 0$. In the absence of pressure, the free oscillation frequency is given by

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AND/OR A ...

NO REF DATE 000

OTHER: 000

LAKHTIN, Yu. M.; SYSOEV, V. I.; TRAPEZIN, I. L.

Machinery - Construction

Manual for machine builders, Vols. 1-3, Reviewed by Yu. M. Lakhtin,
V.I. Sysoev, I.L. Trapezin, Sov. kniga No. 2, 1953

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.